



**AMENDMENTS TO THE CLAIMS, COMPLETE LISTING OF CLAIMS**  
**IN ASCENDING ORDER WITH STATUS INDICATOR**

Please amend the following claims as indicated.

1. (Currently Amended) A gas chromatograph comprising:  
a gas separation column accommodating a member for causing a flow delay  
depending on gas component;  
an air pump for supplying an air as a carrier gas into said gas separation column;  
a gas supply port formed in a gas flow channel extending between said air pump and  
said gas separation column, and adapted to supply a subject gas containing a target gas  
component to be detected into the ~~carrier gas~~ air flowing in said gas flow channel;  
a buffer tank provided upstream of said gas supply port, and having the capability of  
retaining a larger amount of the ~~carrier gas~~ air than the amount of the ~~carrier gas~~ air supplied per  
unit of time into said gas separation column by said air pump; and  
a detector for detecting the gas component of said subject gas supplied to said gas  
separation column,  
wherein said buffer tank has a suction port opened to outside, and a discharge port  
connected to said air pump so that the air sucked by said air pump through said buffer tank is  
sent to said gas separation column through said gas flow channel.

2. (Original) The gas chromatograph as set forth in claim 1 further comprising a  
sensor for sensing a timing of injecting said subject gas into said gas flow channel, and analysis  
means for analyzing said subject gas according to the timing provided from said sensor and an  
output of said detector.

3. (Currently Amended) The gas chromatograph as set forth in claim 1, wherein ~~said~~  
~~buffer tank has an end opened to outside, and the other end connected to said air pump, and a~~  
~~part of said carrier gas~~ the air supplied to said gas flow channel by said air pump is sent to said  
gas separation column, and the rest of ~~said carrier gas~~ the air is returned from said gas flow  
channel to said buffer tank through a branch channel.

4. (Original) The gas chromatograph as set forth in claim 1 further comprising a gas purifier using at least one of a gas decomposition catalyst and a gas absorption material, which is disposed upstream of said gas supply port in said gas flow channel.

5. (Original) The gas chromatograph as set forth in claim 1, further comprising a flow sensor disposed upstream of said gas supply port and at the vicinity of said gas supply port in said gas flow channel, and means for detecting a supply of said subject gas according to a change in output of said flow sensor.

6. (Original) The gas chromatograph as set forth in claim 1 further comprising a flow sensor disposed downstream of said detector and at the vicinity of said detector in said gas flow channel, and means for detecting a supply of said subject gas according to a change in output of said flow sensor.

7. (Original) The gas chromatograph as set forth in claim 1, further comprising a controller for increasing a flow amount of said carrier gas supplied into said gas separation column according to a predetermined pattern from the time point of supplying said subject gas.

8. (Original) A breath component analyzer comprising:  
the gas chromatograph as set forth in claim 1;  
a memory for storing reference data including a retention time previously determined by the gas chromatograph with respect to a breath odor sample having a known gas component;  
and  
analysis means for comparing measurement data including a retention time determined by the gas chromatograph with respect to a breath odor to be measured with the reference data.

9. (Original) The breath component analyzer as set forth in claim 8 comprising means of correcting a fluctuation amount of the retention time of the gas component corresponding to the breath odor to be detected according to the fluctuation amount of the retention time of a constant component in breath.

10. (Original) A gas chromatograph comprising:  
a gas separation column accommodating a member for causing a flow delay depending on gas component;  
a bag-type tank, which is of a variable volume to retain said carrier gas therein, and has a connection port connected to an end of said gas separation column through a gas flow channel;  
an air suction pump provided at the other end of said gas separation column;  
a gas supply port formed between said gas separation column and said bag-type tank to supply a subject gas including a target gas component to be detected into said carrier gas flowing in said gas flow channel; and  
a detector for detecting the gas component of said subject gas supplied to said gas separation column.

11. (Original) A breath component analyzer comprising:  
the gas chromatograph as set forth in claim 10;  
a memory for storing reference data including a retention time previously determined by the gas chromatograph with respect to a breath odor sample having a known gas component; and  
analysis means for comparing measurement data including a retention time determined by the gas chromatograph with respect to a breath odor to be measured with the reference data.

12. (Original) The breath component analyzer as set forth in claim 11 comprising means of correcting a fluctuation amount of the retention time of the gas component corresponding to the breath odor to be detected according to the fluctuation amount of the retention time of a constant component in breath.

13. (New) The gas chromatograph as set forth in claim 1, wherein said gas separation column comprises an external cylinder made of a metal having high thermal conductivity, and a heater wound around an outer peripheral surface of said external cylinder.

14. (New) The gas chromatograph as set forth in claim 1, wherein said gas separation column comprises a double cylinder composed of an external cylinder made of a metal having high thermal conductivity, and an internal cylinder inserted in said external cylinder, a filling material filled as a stationary phase in said internal cylinder, and a heater disposed on said external cylinder.

15 (New) The gas chromatograph as set forth in claim 14, wherein said heater is wound in a spiral manner around an outer peripheral surface of said external cylinder from its one end toward the opposite end.